



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,333	01/23/2002	Parag M. Doshi	Doshi 1-1-3-10-1	8021
46363 7590 12/02/2008 PATTERSON & SHERIDAN, LLP/ LUCENT TECHNOLOGIES, INC 595 SHREWSBURY AVENUE SHREWSBURY, NJ 07702				
EXAMINER GREY, CHRISTOPHER P				
ART UNIT		PAPER NUMBER		
2416				
MAIL DATE		DELIVERY MODE		
12/02/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/055,333

Applicant(s)

DOSHI ET AL.

Examiner

CHRISTOPHER P. GREY

Art Unit

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the appeal brief filed on 8/26/08, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

The final rejection mailed on 03/26/2008 is being replaced with this final rejection. Since Applicant amended the claims in the response filed on 12/20/2007, this replacement Final is proper.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-12, 15-21, 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valentine et al. (US 6504839), hereinafter referred to as Valentine, In view of Yegoshin (US 6711146).

Regarding claim 1, Valentine discloses querying a unified location management device **(Col 6 lines 12-15, where the HLR queries a database)** having location information stored therein for users of said different network protocols **(Col 6 lines 12-22, where the database includes location data of the mobile device, specifically the identity of the MSC that is associated with the mobile, where according to Col 6 lines 35-41, the MSC may have internet protocol capability or not, where not indicates another protocol)**, said users including mobile users **(fig 2, 120 shows a mobile user)**.

relaying mobile user location related information from the unified location manager **(fig 2, HLR 234 relays routing information of the mobiles current location)** regarding a user **(fig 2, 120 is a mobile user)** of the first and second network **(Col 5 lines 62-65, where many MSC's indicates more than one network)**.

selecting a gateway based on the location information provided **(fig 2, where the access server initiates a redirected call request that indicates that a selection of**

the gateway 232 occurs, where the redirection is based on an IP address received as the location info received from the HLR according to Col 6 lines 38-48).

wherein for calls from an internet telephony device (**fig 2, 150 shows a telephony device**) to a mobile device (**fig 2, 120 shows a mobile**), said unified location manager (**fig 2, see HLR and associated database**) operates as an inbound proxy for a given domain (**the HLR acts as an inbound proxy according to the messages sent by the HLR, and also the HLR allows for the redirection of a call request according to fig 2**), allowing selection of a routable temporary phone number (**Col 6 lines 23-35, where the HLR provides an MSRN which is equivalent to a temporary phone number**) such that a call path (**see path of redirection of call request as shown in fig 2**) from the internet telephony device (**fig 2, 150 shows a telephony device**) to the mobile device (**fig 2, 120 shows a mobile**) can bypass the mobile devices home MSC or gateway MSC (**call redirection path bypasses MSC 231 as shown in fig 2**)

PSTN originated calls (**PSTN originated calls originate from 140 of fig 2**) to an internet telephony user (**fig 2, 150 shows telephony device**)

Valentine does not specifically disclose cellular numbers are used to denote internet telephony telephones.

Yegoshin discloses cellular numbers (**Col 7 lines 40-43, where cell phone numbers are used to reach the cell phone**) are used to denote internet telephony telephones (**Col 7 lines 15-19, where the cell phone is a telephony device when attached to a LAN, where data is fwd to cell phone via the PSTN, and according to**

Col 7 lines 60-65, the cell number is used to route the data to the cell phone which is an internet telephony device).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the method of routing data calls to a telephony device of Valentine, as taught by Yegoshin, since stated in Col 3 lines 8-15, that such a modification will allow calls coming from any source network to be routed to the users device on the LAN while enabling substantial cost savings.

Regarding Claim 4. Valentine discloses the location related information being used to assign a location dependent routable temporary telephone number for use in the gateway selection **(Col 6 lines 23-47, where the MSRN plus the IP address allows redirection/selection of the gateway/msc).**

Regarding Claim 5. Valentine discloses wherein said internet telephony accounts are SIP accounts **(Col 1 line 25, where H.323 is known in the art to widely apply SIP).**

Regarding Claim 6. Valentine does not specifically disclose the mobile location information being able to correspond to an internet telephony user.

Yegoshin discloses the mobile location information **(Col 6 lines 27-37 shows an HLR for storing location dependent info)** being able to correspond to an internet telephony user **(Col 5 lines 55-57, where the mobile device such as the mobile device in Valentine is capable of being an internet telephony device).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the method of routing data calls to a telephony

device of Valentine, as taught by Yegoshin, since stated in Col 3 lines 8-15, that such a modification will allow calls coming from any source network to be routed to the users device on the LAN while enabling substantial cost savings.

Regarding Claim 7. Valentine discloses the location related information providing assignment of a GSM/UMTS temporary phone number (**fig 2, shows the basic structure including the BS and MSC, common to GSM and UMTS. The rejections above discuss a temp phone number**).

Regarding Claim 8. Valentine discloses the unified location manager being operable as a home location register (**fig 2, see HLR**) for cellular networks (**fig 2, BS and mobile indicate cellular**)

Valentine does not specifically disclose a user registration and address resolution device for internet telephony networks.

Yegoshin discloses a user registration and address resolution device for internet telephony networks (**Col 6 lines 27-37 shows an HLR for storing location dependent info including cell numbers, where the cell numbers are used for the mobiles attached as telephony devices**).

Regarding Claim 9. Valentine discloses wherein said universal location manager uses a current care of address for providing said location related information for a mobile internet telephony user (see MSRN which is equivalent to a temporary care of address).

Regarding Claim 10. Valentine discloses one of the first and second networks being circuit switched and one of the first and second networks being an internet

telephony network (Col 5 lines 35-50 discuss circuit switched network and packet switched network)

Regarding Claim 11,

Valentine discloses the plurality of network protocols comprising at least 2 of ANSI-41, GSM MAP, SIP (H.323 widely uses SIP), H.323 (Col 1 line 25 shows H.323).

Regarding claim 12,

Valentine discloses querying a unified location management device **(Col 6 lines 12-15, where the HLR queries a database)** having location information stored therein for users of said different network protocols **(Col 6 lines 12-22, where the database includes location data of the mobile device, specifically the identity of the MSC that is associated with the mobile, where according to Col 6 lines 35-41, the MSC may have internet protocol capability or not, where not indicates another protocol)**, said users including mobile users **(fig 2, 120 shows a mobile user)**.

relaying mobile user location related information from the unified location manager **(fig 2, HLR 234 relays routing information of the mobiles current location)** regarding a user **(fig 2, 120 is a mobile user)** of the first and second network **(Col 5 lines 62-65, where many MSC's indicates more than one network)**.

selecting a gateway based on the location information provided **(fig 2, where the redirected call request indicates that a selection of the gateway 232 occurs, where the redirection is based on an IP address received as the location info received from the HLR according to Col 6 lines 38-48)**.

wherein for calls from an internet telephony device (**fig 2, 150 shows a telephony device**) to a mobile device (**fig 2, 120 shows a mobile**), said unified location manager (**fig 2, see HLR and associated database**) operates as an inbound proxy for a given domain (**the HLR acts as an inbound proxy according to the messages sent by the HLR, and also the HLR allows for the redirection of a call request according to fig 2**), allowing selection of a routable temporary phone number (**Col 6 lines 23-35, where the HLR provides an MSRN which is equivalent to a temporary phone number**) such that a call path (**see path of redirection of call request as shown in fig 2**) from the internet telephony device (**fig 2, 150 shows a telephony device**) to the mobile device (**fig 2, 120 shows a mobile**) can bypass the mobile devices home MSC or gateway MSC (**call redirection path bypasses MSC 231 as shown in fig 2**)

PSTN originated calls (**PSTN originated calls originate from 140 of fig 2**) to an internet telephony user (**fig 2, 150 shows telephony device**)

Valentine does not specifically disclose cellular numbers are used to denote internet telephony telephones.

Yegoshin discloses cellular numbers (**Col 7 lines 40-43, where cell phone numbers are used to reach the cell phone**) are used to denote internet telephony telephones (**Col 7 lines 15-19, where the cell phone is a telephony device when attached to a LAN, where data is fwd to cell phone via the PSTN, and according to Col 7 lines 60-65, the cell number is used to route the data to the cell phone which is an internet telephony device**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the method of routing data calls to a telephony device of Valentine, as taught by Yegoshin, since stated in Col 3 lines 8-15, that such a modification will allow calls coming from any source network to be routed to the users device on the LAN while enabling substantial cost savings.

Regarding Claim 15. Valentine discloses the location related information being used to assign a location dependent routable temporary telephone number for use in the gateway selection (**Col 6 lines 23-47, where the MSRN plus the IP address allows redirection/selection of the gateway/msc**).

Regarding Claim 16. Valentine discloses wherein said internet telephony accounts are SIP accounts (**Col 1 line 25, where H.323 is known in the art to widely apply SIP**).

Regarding Claim 17. Valentine does not specifically disclose the mobile location information being able to correspond to an internet telephony user.

Yegoshin discloses the mobile location information (**Col 6 lines 27-37 shows an HLR for storing location dependent info**) being able to correspond to an internet telephony user (**Col 5 lines 55-57, where the mobile device such as the mobile device in Valentine is capable of being an internet telephony device**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the method of routing data calls to a telephony device of Valentine, as taught by Yegoshin, since stated in Col 3 lines 8-15, that such a

modification will allow calls coming from any source network to be routed to the users device on the LAN while enabling substantial cost savings.

Regarding Claim 18, Valentine discloses the unified location manager being operable as a home location register (**fig 2, see HLR**) for cellular networks (**fig 2, BS and mobile indicate cellular**)

Valentine does not specifically disclose a user registration and address resolution device for internet telephony networks.

Yegoshin discloses a user registration and address resolution device for internet telephony networks (**Col 6 lines 27-37 shows an HLR for storing location dependent info including cell numbers, where the cell numbers are used for the mobiles attached as telephony devices**).

Regarding Claim 19, Valentine discloses wherein said universal location manager uses a current care of address for providing said location related information for a mobile internet telephony user (see MSRN which is equivalent to a temporary care of address).

Regarding Claim 20, Valentine discloses one of the first and second networks being circuit switched and one of the first and second networks being an internet telephony network (Col 5 lines 35-50 discuss circuit switched network and packet switched network)

Regarding claim 21, Valentine discloses a data server for storing location and service profile data (**fig 2, HLR stores location info**) for multiple differing network technologies including mobile network technology (**Col 6 lines 12-22, where the**

database includes location data of the mobile device, specifically the identity of the MSC that is associated with the mobile, where according to Col 6 lines 35-41, the MSC may have internet protocol capability or not, where not indicates another protocol);

at least two network protocol gateways (**fig 2, 231 and 232 shows MSC's/gateways**) for translating incoming location information requests into a protocol independent format (**fig 2, see call request and redirected request**);

a processor (**fig 2, 211 acts as a processor**) for interfacing between said data server (**fig 2, 234 shows hlr equivalent to server**) and said protocol gateways (**fig 2, 231 and 232, where according to Col 5 lines 61-65, a plurality of MSC's exist, thus a plurality of 232's are present**), wherein mobile user location related information is able to be provided by said apparatus for use in selection of said gateway (**fig 2, where the redirected call request indicates that a selection of the gateway 232 occurs, where the redirection is based on an IP address received as the location info received from the HLR according to Col 6 lines 38-48**)

wherein for calls from an internet telephony device (**fig 2, 150 shows a telephony device**) to a mobile device (**fig 2, 120 shows a mobile**), said unified location manager (**fig 2, see HLR and associated database**) operates as an inbound proxy for a given domain (**the HLR acts as an inbound proxy according to the messages sent by the HLR, and also the HLR allows for the redirection of a call request according to fig 2**), allowing selection of a routable temporary phone number

(Col 6 lines 23-35, where the HLR provides an MSRN which is equivalent to a temporary phone number) such that a call path (see path of redirection of call request as shown in fig 2) from the internet telephony device (fig 2, 150 shows a telephony device) to the mobile device (fig 2, 120 shows a mobile) can bypass the mobile devices home MSC or gateway MSC (call redirection path bypasses MSC 231 as shown in fig 2)

PSTN originated calls **(PSTN originated calls originate from 140 of fig 2)** to an internet telephony user **(fig 2, 150 shows telephony device)**

Valentine does not specifically disclose cellular numbers are used to denote internet telephony telephones.

Yegoshin discloses cellular numbers **(Col 7 lines 40-43, where cell phone numbers are used to reach the cell phone)** are used to denote internet telephony telephones **(Col 7 lines 15-19, where the cell phone is a telephony device when attached to a LAN, where data is fwd to cell phone via the PSTN, and according to Col 7 lines 60-65, the cell number is used to route the data to the cell phone which is an internet telephony device).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the method of routing data calls to a telephony device of Valentine, as taught by Yegoshin, since stated in Col 3 lines 8-15, that such a modification will allow calls coming from any source network to be routed to the users device on the LAN while enabling substantial cost savings.

Regarding Claim 24. Valentine discloses the location related information being used to assign a location dependent routable temporary telephone number for use in the gateway selection **(Col 6 lines 23-47, where the MSRN plus the IP address allows redirection/selection of the gateway/msc).**

Regarding Claim 25. Valentine discloses wherein said internet telephony accounts are SIP accounts **(Col 1 line 25, where H.323 is known in the art to widely apply SIP).**

Regarding Claim 26. Valentine does not specifically disclose the mobile location information being able to correspond to an internet telephony user.

Yegoshin discloses the mobile location information **(Col 6 lines 27-37 shows an HLR for storing location dependent info)** being able to correspond to an internet telephony user **(Col 5 lines 55-57, where the mobile device such as the mobile device in Valentine is capable of being an internet telephony device).**

It would have been obvious to one of the ordinary skill in the art at the time of the invention was disclosed to combine the method of routing data calls to a telephony device of Valentine, as taught by Yegoshin, since stated in Col 3 lines 8-15, that such a modification will allow calls coming from any source network to be routed to the users device on the LAN while enabling substantial cost savings.

Regarding Claim 27. Valentine discloses the unified location manager being operable as a home location register **(fig 2, see HLR)** for cellular networks **(fig 2, BS and mobile indicate cellular)**

Valentine does not specifically disclose a user registration and address resolution device for internet telephony networks.

Yegoshin discloses a user registration and address resolution device for internet telephony networks **(Col 6 lines 27-37 shows an HLR for storing location dependent info including cell numbers, where the cell numbers are used for the mobiles attached as telephony devices).**

Regarding Claim 28. Valentine discloses wherein said universal location manager uses a current care of address for providing said location related information for a mobile internet telephony user (see MSRN which is equivalent to a temporary care of address).

Regarding Claim 29. Valentine discloses one of the first and second networks being circuit switched and one of the first and second networks being an internet telephony network (Col 5 lines 35-50 discuss circuit switched network and packet switched network)

Regarding Claim 30. Valentine discloses the plurality of network protocols comprising at least 2 of ANSI-41, GSM MAP, SIP (H.323 widely uses SIP), H.323 (Col 1 line 25 shows H.323).

4. Claims 2, 3, 13, 14, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valentine et al. (US 6504839), hereinafter referred to as Valentine, in view of Yegoshin (US 6711146) in view of the admitted prior art.

Regarding Claim 2. The combined teachings of Valentine and Yegoshin do not specifically disclose optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg.

The admitted prior art discloses optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg (page 1 lines 15-23).

It would have been obvious to one of ordinary skill in the art to optimize gateway selection by minimizing any one of triangle routing, a PSTN call leg or an internet call leg since it was known in the art that gateway selection is associated with several different policies related to the associated minimization as disclosed by the admitted prior art.

Regarding claim 3. The combined teachings of Valentine and Yegoshin do not specifically disclose selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call.

The admitted prior art discloses the selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call (page 1 lines 15-23).

It would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the gateway selection as disclosed by the combined teachings of

Valentine and Yegoshin by minimizing the circuit switched portion of a call as disclosed by the admitted prior art.

Regarding Claim 13. The combined teachings of Valentine and Yegoshin do not specifically disclose optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg.

The admitted prior art discloses optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg (**page 1 lines 15-23**).

It would have been obvious to one of the ordinary skill in the art to optimize gateway selection by minimizing any one of triangle routing, a PSTN call leg or an internet call leg since it was known in the art that gateway selection is associated with several different policies related to the associated minimization as disclosed by the admitted prior art.

Regarding claim 14. The combined teachings of Valentine and Yegoshin do not specifically disclose selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call.

The admitted prior art discloses the selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call (page 1 lines 15-23).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to optimize the gateway selection as disclosed by the combined teachings of Valentine and Yegoshin by minimizing the circuit switched portion of a call as disclosed by the admitted prior art.

Regarding Claim 22. The combined teachings of Valentine and Yegoshin do not specifically disclose optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg.

The admitted prior art discloses optimizing gateway selection that minimizes any one of triangle routing, a PSTN call leg or an internet call leg (**page 1 lines 15-23**).

It would have been obvious to one of the ordinary skill in the art to optimize gateway selection by minimizing any one of triangle routing, a PSTN call leg or an internet call leg since it was known in the art that gateway selection is associated with several different policies related to the associated minimization as disclosed by the admitted prior art.

Regarding claim 23. The combined teachings of Valentine and Yegoshin do not specifically disclose selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call.

The admitted prior art discloses the selection of the gateway being optimized by selecting a gateway that minimizes a circuit switched portion of a call (**page 1 lines 15-23**).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to optimize the gateway selection as disclosed by the combined teachings of Valentine and Yegoshin by minimizing the circuit switched portion of a call as disclosed by the admitted prior art.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Sallberg US 6594253 showing a mobility management scheme for a MS to receive telephony calls when the MS is in idle mode. Note that a temp address is used for location updates.
6. Applicant's amendment **filed on 12/20/2007** necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **CHRISTOPHER P. GREY** whose telephone number is (571)272-3160. The examiner can normally be reached on 10AM-7:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moe Aung can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2416

/Christopher P Grey/
Examiner, Art Unit 2416